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EXAMINER

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ART UNIT	PAPER NUMBER
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1764

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Please find below and/or attached an Office communication concerning this application or proceeding..

Claim Rejections - 35 USC § 112

Claims 1-4 and 7-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Independent claim 1 has been amended to include the language “wherein the antioxidant is selected from the group comprising the antioxidants include, but are not limited to,” which does not make any sense. Similarly, in independent claim 17 and 18, the amended claim language “wherein the antioxidant is selected from the group comprising the antioxidants include but are not limited to” is unclear. Also, in claim 1, lines 8-10, the amended claim language “wherein the disperant is selected from the group comprising ashless type disperants such as Mannich dispersants; polymeric disperants; carboxylic dispersants amine, dispersants, ...” does not make sense, i.e., wherein the dispersant is selected from the group comprising ...dispersants.

Claim 15 is drawn to “The process of claim 18” which is improper since claim 18 was not previously presented. In claim 16, “the process of claim 15” is improper since “the” should be capitalized.

Claim Rejections - 35 USC § 102/103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 and 7-16 are still rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Tanaka et al (6,268,316), Ogano et al (6,207,625), Goldblatt et al (6,187,721), Fang et al (5,837,657) and Gao (6,689,725), considered separately.

Applicants' arguments filed 03 October 2005 have been fully considered but they are not persuasive. As previously set forth, Tanaka et al ["Tanaka"] disclose internal combustion engine lubricating compositions comprising a basestock, (A) an organic molybdenum compound, (B) a succinimide which acts as a dispersant in an amount of 0.5% to 25% by weight, and (C) a zinc dithiophosphate which has antioxidant properties in an amount of 0.001 to 3% by weight. The compositions act to disperse the soot produced by combustion in diesel engines which enters the engine oil and, thus, prevents the oil from exercising its lubricity. Tanaka allows for the addition of other additives to the lubricating composition including metal detergents, additional ashless dispersants, phenol-based antioxidants and amine-based antioxidants. See columns 6 and 11-12. The open-ended "additive composition" of independent claim 1 may include other components in major amounts such as base oils and other additives as set forth in dependent claim 3. Thus, the examiner maintains the position that Tanaka anticipates the above rejected claims.

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Applicants argue that:

“Applicants have amended their claims so that the additive composition is selected from the group consisting of a dispersant and an antioxidant wherein Applicants have stated the dispersants and the antioxidant. Accordingly, the references do not teach, nor suggest the dispersant and additive composition that is specifically claimed by Applicant in amended claim 1.”

This is not persuasive because independent claim 1 is still open-ended, i.e., the claim still allows for the addition of other additives as set forth in dependent claim 3. And, as set forth above, Tanaka allows for the addition of the same phenol-based (2,6-di-tert-butyl-4-methylphenol) and amine-based antioxidants (aromatic amines), and allows for the addition of the same succinimide disperants.

As previously set forth, Ogano et al [“Ogano”] disclose lubricating oil compositions comprising a mineral or synthetic base oil, (A) a sulfurized oxymolybdenum dithiocarbamate, and (B) zinc dithiophosphate, which may be used as diesel engine lubricants operating with large quantities of soot in the engine oil. Ogano allows for the addition of conventional lubricant additives to the compositions including viscosity index improver, pour point depressant, ashless dispersant, metallic detergent and antioxidant. See column 6, line 18 to column 7, line 45, where specific components are set forth. Applicants open-ended “additive composition” of independent claim 1 may include other components in major amounts such as base oils. Thus, the examiner maintains the position that Ogano anticipates the above rejected claims.

Applicants argue that:

“Ogano discloses an oil composition comprising a base oil, a sulfurized oxymolybdenum dithiocarbamate and zinc dithiophosphate. In contrast, Applicants claim a dispersant and an antioxidant additive composition.”

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This is not persuasive because independent claim 1 is still open-ended, i.e., the claim still allows for the addition of other additives as set forth in dependent claim 3. And, as set forth above, Ogano allows for the addition of the same phenol-based and amine-based antioxidants (see column 6, line 60-68 to column 7, line 2) and allows for the addition of the same succinimide dispersants.

As previously set forth, Goldblatt et al ["Goldblatt"] discloses that soot in lubricated diesel engines is effectively dispersed without adversely affecting the viscosity of the lubricant by using as the engine oil a composition which comprises a lubricant base stock, a dispersant, a functionalized viscosity index improver and other conventional additives. Suitable conventional additives include detergents, extreme pressure/antiwear agents, oxidation inhibitors, and other minor additives. See column 4, lines 59-64. The open-ended "additive composition" of independent claim 1 may include other components in major amounts such as base oils. Thus, the examiner maintains the position that Goldblatt anticipates the above rejected claims.

Applicants argue that:

"Goldblatt discloses the use of soot and discloses an engine oil with a composition comprising of basestock, a dispersant, a viscosity index improver and other conventional additives. In contrast, Applicants claim specific disperants and antioxidants in an additive composition."

This is not deemed to be persausive because independent claim 1 is still open-ended, i.e., the claim still allows for the addition of other additives as set forth in dependent claim 3. And, as set forth above, Goldblatt allows for the addition of any conventional oxidation inhibitor and the

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references of record disclose that phenol-based and amine-based antioxidants are conventional.

As set forth above, Goldblatt allows for the addition of conventional dispersants.

As previously set forth, Fang et al [“Fang”] disclose a method for improving the performance of a sooted diesel oil and for controlling soot induced viscosity increase by adding to a major amount of diesel oil a minor amount of a composition comprising a molybdenum compound of the formula $\text{Mo}_3\text{S}_k\text{L}_n\text{Q}_z$. Fang teaches that other known additives may be compatible with the invention and can be present in the diesel oil being treated. Such additives include dispersants, detergents, pour point depressants, and antioxidants. See column 5, lines 62-68. The open-ended “additive composition” of independent claim 1 may include other components in major amounts such as base oils. Thus, the examiner maintains the position that Fang anticipates the above rejected claims.

Applicants argue that:

“Fang discloses a composition comprising a molybdenum compound. In contrast, Applicants disclose a dispersant and antioxidant composition.”

This is not deemed to be persuasive because independent claim 1 is still open-ended, i.e., the claim still allows for the addition of other additives as set forth in dependent claim 3. And, as set forth above, Fang allows for the addition of any conventional antioxidant and the references of record disclose that phenol-based and amine-based antioxidants are conventional. As set forth above, Fang also allows for the addition of conventional dispersants.

Gao discloses a method for controlling the soot induced viscosity increase of a diesel engine lubricant composition comprising a base oil and a dispersant, by including in said lubricant composition an effective amount of an antioxidant. The antioxidant comprises a dithiocarbamate of a metal selected from antimony, bismuth and mixtures thereof. The antioxidant may optionally contain at least one other compound selected from phenolic and aminic compounds. Gao teaches that the antioxidant acts to prolong the effective performance of the dispersant additive, thus improving the dispersancy retention capability of the lubricant. See column 1, lines 6-63. Amounts are disclosed in columns 4-5 and include 0.05 to about 3 wt.% of the antimony or bismuth dithiocarbamate, 0.1 to about 3 wt.% of the optional phenolic and/or aminic compounds, and 1 to 10% by weight of the dispersant component. Gao teaches that the lubricating compositions may optionally include antiwear agents, detergents, viscosity index improvers, and other additives. The open-ended "additive composition" of independent claim 1 may include other components in major amounts such as base oils. Thus, the examiner maintains the position that Gao anticipates the above rejected claims.

Applicants argue that:

"Gao discloses a lubricant composition of a base oil and a dispersant. Applicants in contrast claim an additive composition claiming specific disperants and specific antioxidants as stated in amended claim 1. Accordingly, none of the references disclose or teach Applicants' additive composition selected from the group consisting of a dispersant and an antioxidant wherein the antioxidants and the dispersants are specifically stated."

This is not deemed to be persuasive because independent claim 1 is still open-ended, i.e., the claim still allows for the addition of other additives as set forth in dependent claim 3. And, as

set forth above, Gao allows for the addition of at least one phenolic antioxidant and an aminic antioxidant. Gao also allows for the addition of conventional disperants to the composition including succinimides and Mannich condensation products.

Claim Rejections - 35 USC § 102

Claims 1-4 and 7-18 are still rejected under 35 U.S.C. 102(b) as being anticipated by Burrington et al (6,843,916).

As previously set forth, Burrington et al [“Burrington”] disclose a lubricant additive gel formed by the gellation of two or more lubricant additives for the slow release of the additive components into a fluid such as hydrocarbon oil internal combustion engine lubricants. The lubricant additive gels include, but are not limited to those gels formed from combining ashless dispersants such as succinimides, acids, bases and detegents. See column 4, lines 17-28. Additional additives to the gels include viscosity index improvers, extreme pressure agents and antioxidants. See column 8, lines 22-33. Suitable antioxidants include alkyl-substituted phenols such as 2,4-di-tert.-butyl-4-methylphenol, phenate sulfides and aromatic amines. See column 7, lines 22-33. The examiner maintains the position that Burrington anticipates the “additive composition” of independent claim 1 which may be in the form of a gel. Burrington also teaches an oil filter for lubricated systems comprising a housing, a filter, and lubricant additives in the form of a gel for slow release into the oil. See the claims. The examiner maintains the position that Burrington anticipates the above rejected claims.

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Applicants argue that:

“The Burrington et al reference should be removed. Applicants’ invention discloses a similar type of additive composition as Burrington, however, Applicants claim that the additional composition decreases the amount of soot and lubricating oil and decreases the amount of emissions in the engine exhaust. Accordingly the 35 U.S.C. 102(b) should be withdrawn that Burrington does not teach or suggest the decreased amount of soot or emissions in the engine’s exhaust.”

This is not deemed to be persuasive because Burrington teaches that the gel composition may be used in oils suitable for use in internal combustion engines, natural gas engines, stationary engines, and medium and high speed marine diesel engines. The properties of decreasing the amount of soot and emissions in the engine exhaust is seen to be inherent since the compositions may be the same and may be used in the same environment, that as engine lubricants.

The rejection of claims 1-18 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims in copending Application Nos. 10/603,644, 10/603,894 and 10/964,435, made in the previous office action are withdrawn in view of the three (3) terminal disclaimers submitted by applicants in the response filed 03 October 2005.

Applicants’ amendments necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

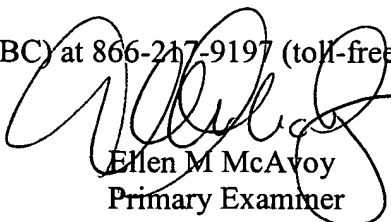
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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ellen M. McAvoy whose telephone number is (571) 272-1451. The examiner can normally be reached on M-F (7:30-5:00) with alt. Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ellen M McAvoy
Primary Examiner
Art Unit 1764

EMcAvoy
January 31, 2006